

REMARKS

Claims 1-20 are pending in the application.

Claims 1-20 have been rejected.

Claims 13 and 20 have been amended to correct minor informalities.

No new matter has been added.

Reconsideration of the Claims is respectfully requested.

1. Claim Objections

Claims 13 and 20 have been objected to due to informalities. Appropriate correction has been made.

2. Rejection under Section 102

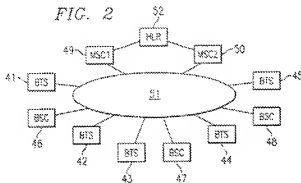
Claims 1-7 and 9 were rejected under 35 USC § 102(a) as being anticipated by U.S. Patent No. 6,408,182, to Davidson et al. (Davidson).

For establishing anticipation, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. . . . The identical invention must be shown in as complete detail as is contained in the . . . claim.” MPEP 2131 at p. 2100-67 (Rev. 5, August 2006) (citations omitted).

Davidson relates to “telecommunications network architecture providing failover operations between mobile switching centers (MSCs). The network architecture includes a communications network such as an Internet Protocol (IP) network in which transmission paths and control paths are logically separated.” (Davidson 1:44-49).

Davidson recites that in the “configuration [of Figure 2], it becomes possible, and more economically viable, to create a system in which a backup MSC can *take control* for a primary

MSC which has failed.” (Davidson 3:15-20). Figure 2 of Davidson “is a simplified block diagram . . . of the radio telecommunications network”:



As recited by Davidson, each “BSC or each radio network controller (RNC) maintains a list of MSCs in the network. This list includes at least one MSC that is a default master MSC, and *at least one MSC that is an alternate MSC*. The list may include *multiple alternate MSCs and other selection criteria in order to reduce the possibility that the load from a failed radio network is switched to an already overloaded MSC.*” (Davidson 3:21-27). As understood, the “alternate MSC(s)” takes the place of the “default master MSC,” and that upon receipt of a failure, the selected alternate MSC of the numerous MSCs *does not* receive “forward[ed] signaling messages from a signaling gateway . . .”

In contrast to Davidson, Applicant’s Independent Claim 1 recites, *inter alia*, a “method for transferring call control to a backup call server, comprising: monitoring a primary call server . . . ; and *upon receipt of an inactive state for said primary call server, forwarding signaling messages from a signaling gateway to a backup call server wherein each signaling gateway may have a different backup call server.*” (emphasis added).

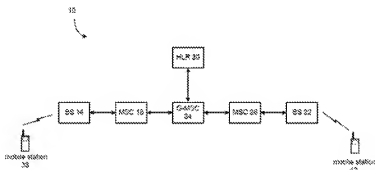
Applicant respectfully submits that each and every element as set forth in its Independent Claim 1 is not found, either expressly or inherently described, in Davidson. Furthermore, Davidson does not show the identical invention as recited in Applicant’s claims. With a single prior art reference. . . . The identical invention must be shown in as complete detail as is contained in the . . . claim. As claims 2-7 and 9 depend directly or indirectly from Claim 1, they are “construed to incorporate by reference all the limitations of the claim to which [they refer].” 35 U.S.C. § 112, ¶ 4. Accordingly, Applicant respectfully submits that Davidson similarly does not recite each and every element nor show the identical invention as set forth in these claims.

3. Rejection under Section 103

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142, p. 2100-125 (Rev. 5, August 2006) (citations omitted).

Claims 10-18 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Davidson.

The Office Actions relies upon the "admitted prior art" set out in Applicant's Specification. Referring to Figure 1:



As discussed in Applicant's Specification, "dual networks evolved for carrying user traffic and signaling traffic, [and] the focus of many designs was to also provide redundancy, not only for the user traffic, but also for the signaling links. Thus, it is common to have a redundant signaling link, perhaps in a different cable bundle or, in a fiber optic ring, routed in an opposite direction, to provide an ability for control signaling to propagate through the network to establish a call despite a link or element failure. Heretofore, however, no geographically separated redundancy has been provided for the endpoints of the signaling network that carries the signaling traffic. More particularly, in phone networks, and especially in cellular phone networks, no geographically separated redundancy has been provided for the mobile switching centers and the gateway mobile switching centers. Typically, the MSCs are consolidated at a switching center geographically distant from the cellular networks they control. One problem associated with

consolidating the switching function is a geographically localized event, such as a tornado or other natural/man-made disaster will disrupt communications over a large area for any network element for which geographically separated redundancy is not provided.” (Specification at page 3, *ll.* 13-23 to page 4, *ll.* 1-3). Figure 1 does not illustrate nor recite, *inter alia*, the use of signaling gateways.

Davidson, as noted above, relates to BSC’s with lists that “may include *multiple alternate MSCs and other selection criteria in order to reduce the possibility that the load from a failed radio network is switched to an already overloaded MSC.*”

Applicant had respectfully submitted that Davidson does not recite each and every element of Applicant’s Independent Claim 1. Further, Applicant respectfully submits that the hypothetical combination of the “admitted prior art” with Davidson does not further provide a showing of *prima facie* obviousness because the cited references *do not* teach or suggest all the claim limitations of Applicant’s claim 8. Applicant respectfully requests that the rejection be withdrawn.

The Office Action took Official Notice “that it will be obvious for those skilled in the art to use and apply transferring call control to a backup call server upon failure of the original G-MSC to a backup G-MSC using the similar steps as disclosed above for the MSC by Davidson et al. when determining that destination MSC has failed” (Office Action at pp. 7-8). Applicant respectfully submits that such statement is improperly overbroad, and further that the circumstances do not permit the use of such procedural devices.

Generally, Official Notice is for use in limited circumstances. MPEP 2144.03. In context, Official Notice is for facts asserted to be well-known, or to be common knowledge in the art that are capable of *instant and unquestionable demonstration as being well-known*. Applicant respectfully submits that the posture taken in the Office Action disregards the knowledge that one of ordinary skill in the art would have had *at the time of* Applicant’s invention, and generally over-generalizes Applicant’s claimed invention by disregarding the specific language set forth in Applicant’s claims. For example, neither Figure 1 of Applicant’s Specification nor Davidson recite the use of signaling gateways as set forth in Applicant’s claimed invention.

Applicant’s Independent Claim 10 recites, *inter alia*, a “method for transferring call control to a backup call server, comprising: transmitting call setup signals between a calling party mobile

station and a BSC; transmitting call setup signals between the BSC and an originating MSC; transmitting call setup signals between the originating MSC and a gateway-MSC (G-MSC) *by way of a first signaling gateway*; transmitting call setup signals from the G-MSC to an HLR, *by way of a second signaling gateway*, to determine a destination MSC; transmitting destination MSC information from the HLR to the G-MSC *by way of the second signaling gateway*; upon determining that the destination MSC has failed, routing the call setup signals received from the G-MSC to a backup MSC and establishing a connection between the backup MSC and the originating MSC; upon determining that the G-MSC has failed, *routing the call setup signals received for the G-MSC to a backup G-MSC* and establishing a connection between the backup G-MSC and the originating MSC; and establishing a call connection between the calling party mobile station and a called party mobile station.” (emphasis added).

Further, Applicant’s Independent claim 13 recites, *inter alia*, a “cellular network, comprising: a G-MSC for establishing call connections between originating MSCs and destination MSCs; a HLR for providing location information to the G-MSC as a part of call setup; *at least one signaling gateway coupled between G-MSC and the HLR*; wherein the HLR determines a primary MSC to serve as a destination MSC for a call being setup based upon a called party mobile station location; wherein the HLR transmits *call signaling messages to the at least one signaling gateway* coupled between the HLR and the G-MSC; and wherein *the at least one signaling gateway* redirects the call signaling messages to a backup G-MSC upon detecting that the G-MSC is in an inactive state.” (emphasis added).

Applicant’s Independent Claim 14 recites, *inter alia*, a “cellular network, comprising: a G-MSC for establishing call connections between originating MSCs and destination MSCs; a HLR for providing location information to the G-MSC as a part of call setup; *a first signaling gateway within a first plurality of signaling gateways* coupled between each of a plurality of MSCs and the G-MSC; *a second signaling gateway* coupled between the G-MSC and the HLR; wherein the HLR reports a destination MSC for a call being setup based upon a called party mobile station location record maintained in the HLR; wherein the HLR transmits call signaling messages to the second gateway coupled between the HLR and the G-MSC; and *wherein the second signaling gateway redirects the call signaling messages to a first backup G-MSC* upon detecting that the G-MSC is in an inactive state; and *wherein the first signaling gateway redirects the call signaling messages to a second backup G-MSC* upon detecting that the G-MSC is in an inactive state.”

Claims 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's admitted prior art in view of Davidson and further in view of U.S. Published Application No. 2003/0061319 to Manzardo ("Manzardo").

Manzardo relates to "method and apparatus that allowed a stand-by server to provide redundant capabilities for conducting calls and maintaining calls in progress without having to update call state databases continuously. In addition, it would be desirable to provide a method and apparatus that allowed such redundant capabilities for communication systems using one or more IP networks." (Manzardo ¶ 0004). Manzardo recites a "stand-by server 104," which is depicted in Figure 1 of Manzardo:

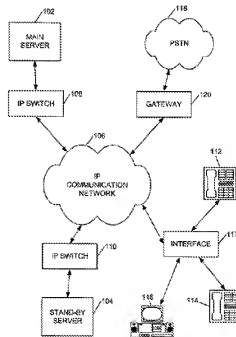


FIG. 1

With respect to Figure 1 of Manzardo, "facilitates redundancy between a main server 102 and a stand-by server 104. The main server 102 and the stand-by server 104 may be connected to or in communication with an IP (Internet Protocol) communication network 106 via IP switches 108, 110, respectively. The IP switches 108, 110 may function as hubs or routers." (Manzardo ¶ 0026). Manzardo, it appears, is cited as including ingredients of a "processor" and a "memory."

Also, Manzardo does not recite a "signaling gateway" as set out in Applicant's claimed invention, but instead generally recites a gateway 120 to connect a PSTN to a network 106. The

“gateway may be used to connect two different networks. For example, the gateway 120 connects the IP network 106 and the PSTN 118. A gateway may be or include a router, hub, switch or switching system, or other device.” (Manzardo ¶ 0037).

In contrast to the cited references, Applicant’s Independent Claim 19 recites, *inter alia*, a “*signaling gateway* for a cellular network coupled to communicate with a destination switching element and to at least one home location register, comprising: a processor; a memory for storing computer instructions that define the operational logic of the signaling gateway, wherein the computer instructions include logic for: *receiving call signaling messages* from one of the HLR or an initiating MSC; *determining whether the destination switching element is in an inactive state*; if the destination switching element is in an inactive state, determining a first backup switching element; and *transparently forwarding the call signaling messages to the backup switching element*.” (emphasis added).

Applicant respectfully submits that there has not been a *prima facie* showing that substantiates the rejection of Applicant’s claimed invention. There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the “admitted prior art” with the alternate MSC of Davidson as to achieve Applicant’s claimed invention set out in Applicant’s Claims 8 and 10-18, and further with the disjointed stand-by server of Manzardo to achieve Applicant’s claimed invention as set out in Applicant’s Claims 19 and 20.

4. Conclusion

As a result of the foregoing, the Applicant respectfully submits that Claims 1-20 in the Application are in condition for allowance, and respectfully requests allowance of such Claims.

If any issues arise, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at ksmith@texaspatents.com.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Garlick Harrison & Markison Deposit Account No. 50-2126.

Respectfully submitted,

Date: October 29, 2007

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